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Paul J. Farrell
DILWORTH & BARRESE, LLP
333 Earle Ovington Blvd.
Uniondale, NY 11553

EXAMINER

DANIEL JR, WILLIE J

ART UNIT PAPER NUMBER

2686

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,065

Applicant(s)

KANG, SUNG-MIN

Examiner

Willie J. Daniel, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Drawings

1. The objections to the Figs. 1, 2, 3A-B are withdrawn, as the proposed drawing corrections are approved.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by **Wong (WO 93/21715)**.

Regarding **Claim 2**, Wong discloses a method for processing a message in a cellular base station system (Fig. 1) including a plurality of base stations (38, 40, 42) which reads on the claimed “subsystems” (see pg. 9, lines 11-16), wherein a message of an updated version has at least one additional information field as compared with a message of a previous version (see abstract; pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 5, 7, 9, 10), where messages include an inserted label field and information block indicating the software package or release being used in which each package has a different message length based on the software package installed, comprising the steps of:

receiving, in a target subsystem (38, 40, 42), a message containing at least a message header from a source subsystem (38, 40, 42) (see pg. 5, line 9-17; Fig. 1, 2, 5, 7, 10);

comparing, in the target subsystem (38, 40, 42), a source current running version value contained in the received message header with a target current running version of the target subsystem (38, 40, 42) (see pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18), where the communications takes place between the systems and subscribers which have different corresponding software packages and features;

processing, in the target subsystem (38, 40, 42), the received message including the added information field, if the source current running version value is equivalent to the target current running version value (see pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9, and 10), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages in which the processing of equivalent fields would be inherent since the systems provide the same services according to the software; and

processing, in the target subsystem (38, 40, 42), the received message excluding the added information field, if the source current running version value is not equivalent to the target current running version value, where the systems will provide a handshake to determine which software version and features are running on the systems, so the target system can know how to handle received messages in which the processing would be inherent for the systems, which may ignore the additional field of the software due to the services offered between the systems which may vary according to the software version running on the different systems (see pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9, and 10). The software packages vary in size according to the features and services offered (see Figs. 5, 7, 9, and 10).

Regarding **Claim 4**, Wong discloses a method for processing a message in a cellular base station system (Fig. 1) including a plurality of subsystems (38, 40, 42), wherein a message of an updated version has at least one additional information field as compared with

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a message of a previous version (see abstract; pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 5, 7, 9, 10), where messages include an inserted label field and information block indicating the software package or release being used in which each package has a different message length based on the software package installed, comprising the steps of:

generating, in a source subsystem (38, 40, 42), a message heading code fields which reads on the claimed "header" including an information field which reads on the claimed "interface version field" having a source current running version value (see pg. 5, line 9-17; Figs. 2, 3, 5);

generating, in the source subsystem (38, 40, 42), a message including the generated message header (see pg. 5, line 9-17; Figs. 2, 3, 5);

transmitting, in the source subsystem, the generated message from the source subsystem to a target subsystem (38, 40, 42) (see abstract; pg. 5, line 6-11; pg. 5, line 22 - pg. 6, line 8; pg. 9, lines 11-16; Figs. 1, 2, 3, 5), where this signaling protocol can be used between different types of communication systems (e.g., cellular base station system) in which the base station controller and base station manager would be inherent;

comparing, in the target subsystem (38, 40, 42), the source current running version value in the received message header with a target current running version value of the target subsystem (38, 40, 42) (see pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18), where the communications takes place between the systems and subscribers which have different corresponding software packages and features;

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processing, in the target subsystem (38, 40, 42), the received message including the added information field, if the source current running version value is equivalent to the target current running version value (see pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9, and 10), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages in which the processing of equivalent fields would be inherent since the systems provide the same services according to the software; and

processing, in the target subsystem (38, 40, 42), the received message excluding the added information field, if the source current running version value is not equivalent to the target current running version value, where the systems will provide a handshake to determine which software version and features are running on the systems, so the target system can know how to handle received messages in which the processing would be inherent for the systems, which may ignore the additional field of the software due to the services offered between the systems which may vary according to the software version running on the different systems (see pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9, and 10). The software packages vary in size according to the features and services offered (see Figs. 5, 7, 9, and 10).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wong (WO 93/21715)** in view of **Rojestal (US 6,074,435)** and **Scholz et al. (hereinafter Scholz) (US 5,421,017)**.

Regarding **Claim 5**, Wong teaches of having a method for processing messages in a cellular base station subsystem including a plurality of subsystems (38, 40, 42), wherein a message of an updated version has at least one additional information field as compared with a message of a previous version (see abstract; pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9, 10), where messages include an inserted label field and information block indicating the software package or release being used in which each package has a different message length based on the software package installed, comprising the steps of:

installing, in a radio equipment which reads on the claimed "base station manager" for controlling the base station system, an updated version of the software (see pg. 13, lines 20-29), where the operators of the equipment have software installed to provide various services in which updating of software would be inherent.

transmitting, in a source subsystem (38, 40, 42), a message having a message header

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including an interface version field having a source current running version value to a target subsystem (see pg. 5, line 6-11; pg. 5, line 22 - pg. 6, line 8; pg. 9, lines 11-16; abstract; Figs. 1, 2, 3, 5), where this signaling protocol can be used between different types of communication systems (e.g., cellular base station system) in which the base station controller and base station manager would be inherent;

detecting, in the target subsystem (38, 40, 42), the source current running version value from the received message header (see pg. 5, lines 9-17; pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18), where the information field determines which software package is running on the system when communications takes place between the subsystems and subscribers which have different corresponding software packages and features;

processing, in the target subsystem (38, 40, 42), all fields of the received message using the updated version of the software, if the source current running version value is equivalent to a target current running version value of the target subsystem (38, 40, 42) (see pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Fig. 1), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages in which the processing of equivalent fields would be inherent since the systems provide the same services according to the software; and

processing, in the target subsystem (38, 40, 42), fields of the received message known to the previous version of the software if the source current running version value is not equivalent to the target current running version value of the target subsystem (38, 40, 42), where the systems will provide a handshake to determine which software version and

features are running on the systems, so the target system can know how to handle received messages in which the processing would be inherent for the systems, which may ignore the additional field of the software due to the services offered between the systems which may vary according to the software version running on the different systems (see pg. 6, lines 24-31; pg. 13, lines 20 - pg. 14, lines 32; pg. 15, lines 2-18; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 1, 5, 7, 9, and 10). The software packages vary in size according to the features and services offered (see Figs. 5, 7, 9, and 10).

Wong fails to disclose the base station manager backing up a previous software version and a base station restarting during installation of downloaded software. However, the examiner maintains that having the base station manager backing up a previous software version was well known in the art, as taught by Scholz.

In the same field of endeavor, Scholz teaches of having the controlling system which reads on the claimed "base station manager" backing up a previous software version (see col. 4, lines 17-33; col. 5, lines 19-31), where the control system has a switch-over process to allow switching between versions of software in which a system can return to the previous software version.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong and Scholz to have a base station manager backing up a previous software version, in order to immediately return to the older software version without interrupting operations in case the new software proves faulty.

Wong and Scholz fail to disclose having the base station restart during installation of downloaded software. However, the examiner maintains that having a base station to restart during installation of downloaded software was well known in the art, as taught by Rojestal.

In the same field of endeavor, Rojestal teaches of having the base station (107) restart (ref. 77) during the downloading of software (see col. 4, lines 48-63; col. 6, lines 5-12; Figs. 7, 10, 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong, Scholz, and Rojestal to have a base station manager backing up a previous software version and a base station restarting during installation of downloaded software, in order to remotely be able to download and replace the software with a newer version in a base transceiver station.

Response to Arguments

4. Applicant's arguments with respect to claims 2, 4, and 5 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJD,JR/wjd,jr
17 May 2004


CHARLES APPIAH
PRIMARY EXAMINER